2.30
30.8.14

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No: CTCE/BBMP/WNo.01/KRIDL/WMM/Gradation/2014-15

19.07.2014

GRADATION FOR WMM
MORTH TABLE-400-II

Client : **Asst. Executive Engineer**, Yelahanka Sub Division, BBMP, Bangalore.

Agency : **Technical Manager**, KRIDL, Bangalore.

Name of Work : Providing asphalting to Old post office road in Ward No.01 of Yelahanka Sub Division, BBMP, Bangalore.

Reference : BBMP/AEE/YSD/PR/185/2014-15 Dated: 16.07.2014

Date of Testing : 19.07.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25700**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	855	855	3.3	96.7	95-100
22.4	6020	6875	26.8	73.2	60-80
11.2	6315	13190	51.3	48.7	40-60
4.75	3580	16770	65.3	34.7	25-40
2.36	2590	19360	75.3	24.7	15-30
0.600	2010	21370	83.2	16.8	8-22
0.075	3030	24400	94.9	5.1	0-8

Notes:

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Civil-Tech Consultants & Engineers Bangalore

For M/s. Civil-Tech Consultants & Engineers

Asst. Executive Engineer
Yelahanka Sub Division
(BBMP Veh. Zn)
Yelahanka, Bangalore

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30.8.14

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No: CTCE/BBMP/W.No.01/KRIDL/BM/Bitumen/2014-15 28.07.2014

BITUMEN CONTENT DETERMINATION OF BITUMINOUS MACADAM MIX

AS per IRC:SP:-1984

CLIENT	Asst. Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	Technical Manager, KRIDL, Bangalore.
NAME OF THE WORK	Providing asphalting to Old post office road in Ward No.01 of Yelahanka Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YSD/PR/185/2014-15 Dated: 16.07.2014
SAMPLE I/D	Old post office road in Ward No.01.
DATE OF TESTING	28.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	482	482.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	18	17.50
7. Bitumen content in %	3.60	3.50
8. Average	3.55	

Note:

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b) The results indicated above are based on the tests carried out on the samples received in the laboratory.

c) Any Query regarding the report must be reported within 30 days from date of testing.

M/s. Civil-Tech Consultants & Engineers
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Asst. Executive Engineer
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(BBMP Ward No. 01)
Yelahanka, Bangalore

CIVIL-TECH CONSULTANTS AND ENGINEERS

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Job No: CTCE/BBMP/W.No.01/KRIDL/BM/Bitumen/2014-15 28.07.2014

GRADATION DETERMINATION OF BITUMINOUS MACADAM MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	Asst. Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	Technical Manager, KRIDL, Bangalore.
NAME OF THE WORK	Providing asphalting to Old post office road in Ward No.01 of Yelahanka Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YSD/PR/185/2014-15 Dated: 16.07.2014
SAMPLE I/D	Old post office road in Ward No.01.
DATE OF TESTING	28.07.2014

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	32.58	6.76	6.76	93.24	90-100
13.2	93.55	19.41	26.17	73.83	56-88
4.75	260.5	54.05	80.22	19.78	16-36
2.36	47.85	9.93	90.14	9.86	4-19
0.3	16.52	3.43	93.57	6.43	2-10
0.075	16.25	3.37	96.94	3.06	0-8

▷ The results indicated above are based on the tests carried	Trail 2				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	39.58	8.20	8.20	91.80	90-100
13.2	99.56	20.63	28.84	71.16	56-88
4.75	260.1	53.91	82.74	17.26	16-36
2.36	44.52	9.23	91.97	8.03	4-19
0.3	19.23	3.99	95.96	4.04	2-10
0.075	8.56	1.77	97.73	2.27	0-8

Note:

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CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No: CTCE/BBMP/WNo.01/KRIDL/SDBC/Br/2014-15 29.07.2014

BITUMEN CONTENT DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer**, Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager**, KRIDL, Bangalore.
NAME OF THE WORK	Providing asphalting to Old post office road in Ward No.01 of Yelahanka Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YSD/PR/185/2014-15 Dated: 16.07.2014
SAMPLE I/D	Old post office road in Ward No.01.
DATE OF TESTING	29.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	475
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g (corrected)	25	25.00
7. Bitumen content in %	5.00	5.00
8. Average	5.00	

Note:

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Asst. Executive Engineer
Yelahanka Sub Division
(Ward No. 01)
Yelahanka, Bangalore

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No: CTCE/BBMP/W.No.01/KRIDL/SDBC/Bit/2014-15 29.07.2014

GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	Asst. Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	Technical Manager, KRIDL, Bangalore.
NAME OF THE WORK	Providing asphalting to Old post office road in Ward No.01 of Yelahanka Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YSD/PR/185/2014-15 Dated: 16.07.2014
SAMPLE I/D	Old post office road in Ward No.01.
DATE OF TESTING	29.07.2014

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	33.25	7.00	7.00	93.00	90-100
4.75	262.2	55.20	62.20	37.80	35-51
2.36	46.58	9.81	72.01	27.99	24-39
1.18	33.25	7.00	79.01	20.99	15-30
0.3	37.85	7.97	86.97	13.03	9-19
0.075	34.25	7.21	94.19	5.81	3-8

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
st be reported wi	0	0	0	100	100
9.5	37.88	7.97	7.97	92.03	90-100
4.75	264.5	55.68	63.66	36.34	35-51
2.36	49.23	10.36	74.02	25.98	24-39
1.18	31.25	6.58	80.60	19.40	15-30
0.3	25.52	5.37	85.97	14.03	9-19
0.075	37.85	7.97	93.94	6.06	3-8

Note:

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